

What is claimed is:

Claims

1. A method for removing the 3'-untranslated region of a population of DNA molecules, wherein each DNA molecule in said population of DNA molecules comprises an open reading frame and a 3'-untranslated region, said method comprising:

(a) providing a population of DNA molecules, each of said DNA molecules terminating at its 5' end in an overhang and at its 3' end in a blunt end; and

(b) treating each of said DNA molecules first with a 3'→5' exonuclease and then with a single-stranded nuclease under conditions that allow removal of said 3'-untranslated region.

2. The method of claim 1, wherein said 3'→5' exonuclease is exonuclease III.

3. The method of claim 1, wherein said nuclease is Mung bean nuclease.

4. The method of claim 1, wherein step (b) further results in removal of the stop codon of said open reading frame.

5. The method of claim 1, wherein each of said DNA molecules is a cDNA produced by reverse transcription from an mRNA sequence.

6. The method of claim 1, wherein said population comprises at least 10 DNA molecules.

7. The method of claim 1, wherein said population comprises at least 10^2 DNA molecules.

8. The method of claim 1, wherein said population comprises at least 10^3 DNA molecules.

9. The method of claim 1, wherein said population comprises at least 10^4 DNA molecules.

10. The method of claim 1, wherein said population comprises at least 10^5 DNA molecules.

11. The method of claim 1, wherein said population comprises at least 10^6 DNA molecules.